

IN THE CLAIMS

This listing of the claims replaces all prior listings.

Listing of Claims:

1. (Currently Amended) A battery, comprising:

a cathode;
an anode; and
an electrolyte,
wherein,

the anode has an anode collector made of an electric copper foil and an anode active material layer including at least one selected from the group consisting of silicon and compounds of silicon which is provided on the anode collector and which is alloyed with the anode collector on at least a part of interface between the anode active material layer and the anode collector, and

the electrolyte contains an electrolyte solution containing vinylethylene-carbonate and an electrolytic salt.

2. (Currently Amended) A battery, comprising:

a cathode;
an anode; and
an electrolyte,
wherein,

the anode has an anode collector made of an electric copper foil and an anode active material layer which is formed on the anode collector by at least one method from the group consisting of vapor-phase method, liquid phase method and sinter method, and

the electrolyte contains an electrolyte solution containing vinylethylene carbonate and an electrolytic salt.

3. (Original) A battery according to claim 2, wherein the anode active material layer is alloyed with the anode collector on at least a part of interface between the anode active material layer and the anode collector.

4. (Currently Amended) A battery according to claim 2, wherein the anode active material layer includes at least one kind from the group consisting of (Si) ~~or tin (Sn)~~ and compounds of silicon ~~(Si) or tin (Sn)~~.

5. (Previously Presented) A battery according to claim 2, wherein the electrolyte solution further contains vinylene carbonate.

6. (Currently Amended) A battery according to claim [[2]] 5, wherein a content of the vinylene carbonate in the electrolyte solution is from 0.1 wt% to 30 wt%.

7. (Original) A battery according to claim 2, wherein the electrolyte further includes a polymeric material.

8. (Original) A battery according to claim 2, wherein film exterior members which house the cathode, the anode, and the electrolyte are further provided.

9. (Original) A battery according to claim 2, wherein the cathode contains a metal complex oxide including lithium.

10. (Cancelled)

11. (Currently Amended) A battery, comprising:

a cathode;

an anode; and

an electrolyte,

wherein,

the anode has an anode collector made of an electrolytic copper foil and an anode active material layer which is provided on the anode collector by at least one method from the group consisting of vapor-phase method and liquid-phase method, and

the electrolyte contains an electrolyte solution containing vinylene carbonate and an electrolyte salt,

wherein,

a content of the vinylene carbonate in the electrolyte solution is from 0.1 wt % to 30 wt %.

12. (Previously Presented) A battery according to claim 11, wherein the anode active material layer is alloyed with the anode collector on at least a part of interface between the anode active material layer and the anode collector.

13. (Currently Amended) A battery according to claim 11, wherein the anode active material layer includes at least one kind from the group consisting of (Si) ~~or tin (Sn)~~ and compounds of silicon (Si) ~~or tin (Sn)~~.

14. (Previously Presented) A battery according to claim 11, wherein the electrolyte solution further includes a polymeric material.

15. (Previously Presented) A battery according to claim 11, wherein film exterior members which house the cathode, the anode, and the electrolyte are further provided.

16. (Previously Presented) A battery according to claim 11, wherein the cathode contains a metal complex oxide including lithium.

17. (New) A battery, comprising:
a cathode;
an anode; and
an electrolyte,
wherein,
the anode has an anode collector and an anode active material layer including silicon which is provided on the anode collector by a sintering method,

the anode active material is alloyed with the anode collector on at least a part of interface between the anode active material layer and the anode collector, and

the electrolyte contains an electrolyte solution containing vinylethylene-carbonate and an electrolytic salt.

18. (New) A battery according to claim 17, wherein the electrolyte solution further contains vinylene carbonate.

19. (New) A battery, comprising:

a cathode;

an anode; and

an electrolyte,

wherein,

the anode has an anode collector and an anode active material layer including tin which is formed on the anode collector by a plating methods,

the anode active material is alloyed with the anode collector on at least a part of interface between the anode active material layer and the anode collector, and

the electrolyte contains an electrolyte solution containing vinylethylene-carbonate and an electrolytic salt.

20. (New) A battery according to claim 19, wherein the electrolyte solution further contains vinylene carbonate.

21. (New) A battery according to claim 19, wherein the anode material is applied heat treatment under vacuum atmosphere or non-oxidizing atmosphere.